CLAIMS

What is claimed is:

1. A method of providing multiple quality of service classes to subscribers in a network, the method comprising the steps of:

determining a subscriber's quality of service information by using a database containing quality of service information for each subscriber that has subscribed to one of the multiple quality of service classes; and

storing the subscriber's quality of service information in a visitor location register where the subscriber is currently registered.

2. The method as recited in claim 1, further comprising the step of using the subscriber's quality of service information stored in the visitor location register during a call setup to determine a call transmission quality for the subscriber.

3. The method as recited in claim 1, wherein the subscriber's quality of service information corresponds to a default quality of service class when the subscriber is not listed in the database.

4. The method as recited in claim 1, wherein each quality of service class provides a different transmission bandwidth.

5. The method as recited in claim 1, wherein each quality of service class provides a different call routing priority.

6. The method as recited in claim 1, wherein each quality of service class provides a different level of call security.

7. The method as recited in claim 1, wherein the network is a asynchronous transfer mode network.

8. The method as recited in claim 1, wherein the network is a mobile access network and the visitor location register is integrated in a mobile switching center.

9.   The method as recited in claim 1, wherein the network is a satellite network and the visitor location register is integrated in a network control center.

10.   The method as recited in claim 1, wherein the subscriber accesses the network with a mobile terminal.

11.   The method as recited in claim 1, wherein the subscriber accesses the network through a fixed access terminal.

22

12. A method of providing multiple quality of service classes to subscribers in a network, the method comprising the steps of:

receiving an attach request at a visitor location register;

sending an update location request from the visitor location register to a database containing quality of service information for each subscriber that has subscribed to one of the multiple quality of service classes;

sending the update location request from the database to a home location register;

sending an update location result from the home location register to the database;

determining a subscriber's quality of service information using the database;

modifying the update location result to include the subscriber's quality of service information;

sending the modified update location result to the visitor location register; and

storing the subscriber's quality of service information in the visitor location register.

23

13. The method as recited in claim 12, further comprising the step of using the subscriber's quality of service information stored in the visitor location register during a call setup to determine a call transmission quality for the subscriber.

14. The method as recited in claim 12, wherein the subscriber's quality of service information corresponds to a default quality of service class when the subscriber is not listed in the database.

15. The method as recited in claim 12, wherein each quality of service class provides a different transmission bandwidth.

16. The method as recited in claim 12, wherein each quality of service class provides a different call routing priority.

17. The method as recited in claim 12, wherein each quality of service class provides a different level of call security.

18. A method of providing multiple quality of service classes to subscribers in a network, the method comprising the steps of:

receiving an attach request at a visitor location register;

sending an update location request from the visitor location register to a database containing quality of service information for each subscriber that has subscribed to one of the multiple quality of service classes;

determining a subscriber's quality of service information using the database;

sending a first message from the database to the visitor location register, wherein the first message contains the subscriber's quality of service information;

storing the subscriber's quality of service information in the visitor location register;

sending a second message from the visitor location register to the database, wherein the second message acknowledges receipt of the first message;

sending the update location request from the database to a home location register; and

25

sending the update location result to the visitor location register.

19. The method as recited in claim 18, further comprising the step of using the subscriber's quality of service information stored in the visitor location register during a call setup to determine a call transmission quality for the subscriber.

20. The method as recited in claim 18, wherein the subscriber's quality of service information corresponds to a default quality of service class when the subscriber is not listed in the database.

21. The method as recited in claim 18, wherein each quality of service class provides a different transmission bandwidth.

22. The method as recited in claim 18, wherein each quality of service class provides a different call routing priority.

23. The method as recited in claim 18, wherein each quality of service class provides a different level of call security.

24. An apparatus for providing multiple quality of service classes to subscribers in a network, the apparatus comprising:

a database containing quality of service information for each subscriber that has subscribed to one of the multiple quality of service classes;

a code segment for determining a subscriber's quality of service information using the database; and

a code segment for sending the subscriber's quality of service information to a visitor location register where the subscriber is currently registered.

25. The apparatus as recited in claim 24, wherein the subscriber's quality of service information corresponds to a default quality of service class when the subscriber is not listed in the database.

26. The apparatus as recited in claim 24, wherein each quality of service class provides a different transmission bandwidth.

27. The apparatus as recited in claim 24, wherein each quality of service class provides a different call routing priority.

28. The apparatus as recited in claim 24, wherein each quality of service class provides a different level of call security.

29. The apparatus as recited in claim 24, wherein the network is a asynchronous transfer mode network.

30. The apparatus as recited in claim 24, wherein the network is a mobile access network and the visitor location register is integrated in a mobile switching center.

31. The apparatus as recited in claim 24, wherein the network is a satellite network and the visitor location register is integrated in a network control center.

32. An apparatus for providing multiple quality of service classes to subscribers in a network, the apparatus comprising:

a database containing quality of service information for each subscriber that has subscribed to one of the multiple quality of service classes;

a code segment for determining a subscriber's quality of service information using the database;

a code segment for receiving an update location request from a visitor location register and sending the update location request to a home location register;

a code segment for receiving an update location result from the home location register;

a code segment for modifying the update location result to include the subscriber's quality of service information; and

a code segment for sending the modified update location result to the visitor location register.

33. The apparatus as recited in claim 32, wherein the subscriber's quality of service information corresponds to a default quality of service class when the subscriber is not listed in the database.

34. The apparatus as recited in claim 32, wherein each quality of service class provides a different transmission bandwidth.

35. The apparatus as recited in claim 32, wherein each quality of service class provides a different call routing priority.

36. The apparatus as recited in claim 32, wherein each quality of service class provides a different level of call security.

37. An apparatus for providing multiple quality of service classes to subscribers in a network, the apparatus comprising:

a database containing quality of service information for each subscriber that has subscribed to one of the multiple quality of service classes;

a code segment for determining a subscriber's quality of service information using the database;

a code segment for sending a message to a visitor location register, wherein the message contains the subscriber's quality of service information; and

a code segment for receiving an update location request from the visitor location register and sending the update location request a home location register.

38. The apparatus as recited in claim 37, wherein the subscriber's quality of service information corresponds to a default quality of service class when the subscriber is not listed in the database.

39. The apparatus as recited in claim 37, wherein each quality of service class provides a different transmission bandwidth.

40. The apparatus as recited in claim 37, wherein each quality of service class provides a different call routing priority.

41. The apparatus as recited in claim 37, wherein each quality of service class provides a different level of call security.

42. A system for providing multiple quality of service classes to subscribers in a network, the system comprising:

a database containing quality of service information for each subscriber that has subscribed to one of the multiple quality of service classes;

a visitor location register coupled to the database via a communication link;

a code segment coupled to the database for determining a subscriber's quality of service information using the database;

a code segment coupled to the database for sending the subscriber's quality of service information to the visitor location register; and

a code segment coupled to the visitor location register for storing the subscriber's quality of service information in the visitor location register.

43. The system as recited in claim 42, wherein the subscriber's quality of service information corresponds to a default quality of service class when the subscriber is not listed in the database.

44. The system as recited in claim 42, wherein each quality of service class provides a different transmission bandwidth.

45. The system as recited in claim 42, wherein each quality of service class provides a different call routing priority.

46. The system as recited in claim 42, wherein each quality of service class provides a different level of call security.

47. The system as recited in claim 42, wherein the network is a asynchronous transfer mode network.

48. The system as recited in claim 42, wherein the network is a mobile access network and the visitor location register is integrated in a mobile switching center.

49. The system as recited in claim 42, wherein the network is a satellite network and the visitor location register is integrated in a network control center.